ABSTRACT OF THE DISCLOSURE

A method and apparatus for interpreting and executing a program may include accessing a program in memory, parsing the program, generating an intermediate representation equivalent of the program, and executing the intermediate representation by accessing the program's library of host objects through an interface to the library. The program may be a JavaScript program embedded in HTML documents in a browser. The Web browser is programmed to intercept the JavaScript code and pass execution control over the program to the interpreter engine developed in Java. The parsing component of the engine validates the JavaScript instructions. The validated instructions are converted by the code generator component of the engine into an intermediate representation equivalent in Java code. The interpreter engine accesses the program's library of host objects through an interface to the library and executes the intermediate representation to produce the desired results as programmed in the original JavaScript source program.